

## Noranda Group and Associates

Noranda and its associated companies are engaged in four major areas of business: mining and metallurgy, manufacturing, forest products and natural gas. They are major producers of copper, molybdenum, gold, silver and lead and are the world's largest mine producers of zinc. Noranda smelts and refines much of its own mine production. Manufacturing operations in Canada primarily consist of processing metals produced by Noranda into wire, cable, sheet, tube and other products for use by industry. In the United States manufacturing operations primarily consist of aluminum production, fabrication of aluminum building products and production of aluminum sheet and foil products. Noranda and its associated companies are the largest producers of forest products in Canada, producing lumber, plywood, wafer-board, pulp and paper. Noranda is also engaged in oil and natural gas exploration and production in western Canada and the United States and oil and gas exploration in the Arctic.

Noranda is also in the business of smelting and refining copper concentrates produced by 15 other mining companies including three associated companies. Noranda markets its own production as well as mine and metal production of 14 other companies including eight associated companies.

**noranda** group

## **MINING**

### **Geco Division (wholly-owned)**

The Geco mine, located in Manitouwadge in northwestern Ontario, is a copper-zinc-silver producer. Ores are treated at the concentrator at the mine which has a capacity to treat over 5,000 tons per day.  
(807) 826-3211

### **Babine Mining Division-Bell Mine (wholly-owned)**

Located at Babine Lake, British Columbia is the Bell copper mine. Its concentrator has a capacity of 16,500 tons per day. Copper concentrate from this operation is treated at the Horne smelter at Noranda, Quebec.  
(604) 697-2201

### **Mines Gaspe Division (wholly-owned)**

Noranda's Mines Gaspe Division in Murdochville, Quebec mines and mills copper-bearing ore. The concentrator has a capacity to treat approximately 33,000 tons of ore per day. The copper concentrate produced is treated at the Gaspe smelter.  
(418) 784-2541

### **Matagami Division (wholly-owned)**

The Matagami Division in the Matagami area of northwestern Quebec, operates two mines and one mill. The Matagami Lake Mine and the Norita Mine are both zinc-copper mines. The mill at Matagami Lake has a capacity of 4,500 tons per day. All zinc concentrate production is treated at Noranda's Canadian Electrolytic Zinc reduction plant at Valleyfield, Quebec. All of the copper concentrate is smelted and refined by Noranda.  
(819) 739-2511

### **Central Canada Potash (wholly-owned)**

Central Canada Potash, located near Saskatoon, Saskatchewan, operates a potash mine. The mill has the capacity to produce 4,400 tons per day of muriate of potash.  
(306) 944-2170

### **Heath Steele Mines Limited (wholly-owned)**

Heath Steele has a 75% interest in the Little River Joint Venture which operates a 4,000 tons-per-day lead-zinc-copper mine and mill near Newcastle, New Brunswick.  
(506) 622-2100

### **Brunswick Mining and Smelting Corporation Limited Mining Division (64.1%)**

Located near Bathurst, New Brunswick, Brunswick Mining and Smelting Corporation operates an underground mine known as the No. 12 mine which produces ore containing zinc, lead, silver and copper. The concentrator has three separate circuits, each of which is capable of treating ore to produce separate zinc, lead and copper concentrates as well as a lead-zinc bulk concentrate. Combined capacity is 10,500 tonnes of ore per day.  
(506) 546-6671



### **Brenda Mines Ltd. (49.9%)**

Brenda Mines Ltd. operates a copper-molybdenum mine and a 29,000 tons-per-day concentrator near Peachland, British Columbia. Brenda is also involved in several oil and gas drilling programs.  
(604) 493-0220

### **Kerr Addison Mines Limited (49.9% direct, 18.6% indirect)**

Kerr Addison Mines Limited owns and operates a gold mine near Virginiatown in the Larder Lake area of northern Ontario. The concentrator is currently operating at a daily rate of 800 tons.  
(705) 634-2121

### **Mattabi Mines Limited (60%)**

Mattabi Mines Limited operates a zinc-copper-lead-silver mine in the Sturgeon Lake area of northwestern Ontario. The concentrator has a rated capacity of 3,000 tons per day.  
(807) 934-2291

### **Placer Development Limited (31.0%)**

Placer Development Limited, a diversified holding, operating and exploration company, owns and operates a major molybdenum mine in British Columbia and a gold mine in Montana; has interests in and operates six other mines; and has an oil and gas exploration and production company.  
(604) 682-7082

### **Pamour Porcupine Mines, Limited (48.7%)**

Pamour Porcupine Mines, Limited operates two mills and treats gold and copper-bearing ores from five mining properties in the Porcupine area of Ontario.  
(705) 267-1141

### **Tara Exploration and Development Company Limited (49%)**

Tara Exploration and Development Company Limited, through a subsidiary, has developed a zinc-lead mine and concentrator in Ireland.

### **Other Mining Interests**

Noranda owns Boss Mountain, a molybdenum mine, and Goldstream Division, a copper-zinc-gold mine, in British Columbia; Alberta Sulphate Limited, which has a sodium sulphate operation in Alberta; Noranda Lakeshore Mines, Inc., a copper mine in Arizona; Noranda Grey Eagle Mines Inc., an open pit gold mine and mill in California; and Hopewell Land Corporation, a strip-mine phosphate property under development in Florida. Noranda is also involved in several small mining properties located in the northwest and the Noranda area of Quebec, including the Chadbourne and Camlaren mines. In Ontario, off the north shore of Lake Superior, Noranda, in a joint venture, is developing a world class gold mine and milling complex called the Hemlo Project. The operation should be ready for start-up at 1000 tonnes per day in the first quarter of 1985. Another Noranda subsidiary, Grupo Industrial Las Cuevas S.A., has a 49% interest in a fluorspar mine in Mexico.  
(416) 867-7111

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## **OIL AND GAS**

### **Canadian Hunter Exploration Ltd. (87%)**

Canadian Hunter Exploration Ltd. manages an oil and gas exploration and development program in western Canada. Gas production is approximately 112 million cubic feet per day. They also manage a joint venture exploration program in the United States. Total net land holdings at December 31, 1983 were 3.5 million acres.

(403) 260-1000

### **Brenda Mines Ltd. (49.9%)**

Brenda Mines Ltd. is involved in oil and gas exploration programs in western Canada, the Beaufort Sea, the British Virgin Islands and Australia.

(403) 264-3120

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## **EXPLORATION AND RESEARCH**

Noranda has permanent exploration offices in Canada, the United States, Australia, Europe and South America.

(416) 867-7269

The Noranda Research Centre in Pointe Claire, Quebec is involved in scientific and technological research for companies within the Noranda Group, as well as for other companies.

(514) 697-6640

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## **METALLURGY**

### **Horne Division (wholly-owned)**

The Horne smelter at Noranda, Quebec has the capacity to handle about 1.1 million tons of concentrate per year and to produce about 250,000 tons of copper per year. This smelter treats copper concentrates from the Geco, Babine, Matagami, Goldstream and Lyons Lake Division mines, and on a custom basis, copper concentrates from 10 other mines.

Noranda has developed a patented copper smelting process. A commercial size prototype reactor which utilizes the Noranda continuous smelting process commenced production at the Horne smelter in 1973 and currently handles approximately two-thirds of the materials smelted. The process has been marketed internationally.

(819) 762-7764

### **Mines Gaspé Division (wholly-owned)**

Mines Gaspé has a smelter at Murdochville, Quebec which treats copper concentrate produced from its mines, and, on a custom basis, copper concentrate from two other mines. This smelter has the capacity to produce about 75,000 tons of copper per year.

(418) 784-2541

### **CCR Division (wholly-owned)**

Anode copper from the Horne and Gaspé smelters and other unrefined copper and copper scrap are refined at Noranda's CCR Division in Montreal East, Quebec. This is one of the largest copper refineries in the world with a capacity of 410,000 tons per year.

(514) 642-8440



### **Canadian Electrolytic Zinc Limited (90.2% direct, 4.9% indirect)**

Canadian Electrolytic Zinc Limited operates a zinc reduction plant at Valleyfield, Quebec. The plant converts concentrate produced or purchased by its owners into zinc metal and cadmium and has a capacity of 250,000 tons of zinc metal per year. In addition, 1,300 tons of sulphuric acid are produced as a by-product daily.

(514) 373-9144

### **Brunswick Mining and Smelting Corporation Limited Smelting Division (64.1%)**

The Brunswick smelter, located at Belledune, New Brunswick, is designed to handle about 264,000 tons of lead concentrate per year. Noranda owns Belledune Fertilizer, a diammonium phosphate fertilizer plant adjacent to the Brunswick smelter. This plant consumes the sulphuric acid produced as a by-product of the smelter.

(506) 522-2100

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## **MARKETING**

### **Noranda Sales Corporation Ltd. (wholly-owned)**

Noranda Sales is responsible for: marketing the mining and metallurgical products of Noranda as well as for several other mining companies; commodity purchases; trading and investment; trade development; and new commercial ventures. Subsidiaries are: Noranda Sales Corporation of Canada Limited in London, England which services the European Economic Community, the East Bloc, the Middle East and Africa, and Noranda Sales Inc. located in Cleveland, Ohio.

(416) 867-7111

### **Rudolf Wolff Group Ltd. (wholly-owned)**

Located in London, England this subsidiary of Noranda Sales Corporation of Canada Limited, along with its affiliates or agents in New York, Hamburg, Zurich, Johannesburg, Melbourne and Hong Kong conduct a world wide commodity brokerage business.

### **Canadian American Metal Co. (65%)**

This corporate partnership located in New York city is responsible for physical trading and marketing management in metals and minerals principally in the North American market.

(212) 532-9360

### **Nutrite Inc. and Nutrite Corp. (50%)**

These companies are fertilizer blending and distribution operations in eastern Canada and the northeastern United States.

(514) 462-2555

### **Norcoal Company (70%)**

This corporate partnership located in Charleston, West Virginia is an agent and broker for small U.S. coal producers.

(304) 343-4168

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## **MANUFACTURING**

Various subsidiaries and associated companies are engaged in the fabrication and sale of brass mill products, wire and cable, iron foundry products, wire rope, plastic pipe, primary aluminum and aluminum sheet, extrusions and building products.

### **Canada Wire and Cable Limited (wholly-owned)**

Canada Wire and Cable Limited is one of the largest manufacturers of electrical wire and cable in Canada. Its eleven plants and five warehouses are located in major markets across Canada. A division, Canstar Communications, is involved in the design and installation of fibre optic systems while production of the fibre is handled by Canada Wire's Communications Products Division in Winnipeg, Manitoba.

Canada Wire's international operations include the U.S. operations of Carol Wire and Cable, consisting of twelve plants, producing electrical cords and accessories. In addition, minority interests in wire and cable manufacturers have been established in Ireland, Colombia, Dominican Republic, Mexico, New Zealand, Nigeria, South Africa and Venezuela.

Grandview Industries, a division of Canada Wire, produces plastic pipe at Rexdale, Ontario, Weyburn, Saskatchewan and Langley, British Columbia; blends resins at Brampton, Ontario; and fabricates plastic products at Toronto, Ontario. Plastic fittings are produced by Canplas Industries Ltd., a 50% owned associate, in New Westminister, British Columbia and Barrie, Ontario.

(416) 424-5000

### **Noranda Metal Industries Limited (wholly-owned)**

Noranda Metal Industries Limited manufactures copper and copper-base alloy products. It produces rod and tube at Montreal East, Quebec; strip and sheet at Fergus, Ontario; and copper tube on Annacis Island near Vancouver, British Columbia. Noranda Metal Industries Inc. manufactures specialty tubing at Newtown, Connecticut. A joint venture was formed with Sandvik of Sweden to operate a steel alloy tubing facility at Arnprior, Ontario under the name of Nor-Sand Metals Inc.

The Norcast Division of Noranda Metal Industries has a secondary metal recovery plant at Moncton, New Brunswick.

(514) 645-8741

### **Noranda Aluminum, Inc. (wholly-owned)**

Noranda Aluminum, Inc., operates an aluminum reduction plant and a rod, wire and cable mill at New Madrid, Missouri. The reduction plant has three potlines with a capacity of 235,000 tons per year. The rod, wire and cable mill which is located adjacent to the reduction plant has a capacity of 16,000 tons per year and produces steel reinforced aluminum conductor and redraw rod.

Noranda Aluminum has a 38.5% interest in Frialco, a joint venture which owns 51% of Friguia, which in turn owns a bauxite-alumina facility in Guinea, West Africa having a capacity of 650,000 metric tons of alumina per year.

(314) 643-2361

### **Norandal USA, Inc. (wholly-owned)**

Norandal USA, Inc. is an aluminum casting, sheet and foil plant with a capacity of 40,000 tons of sheet and foil products per year located at Huntingdon, Tennessee.

(901) 986-5011



### **Norandex, Inc. (wholly-owned)**

Norandex, Inc. manufactures aluminum extrusions, windows, doors, siding and other building materials at Cleveland, Ohio and distributes these together with purchased building materials through a network of 60 warehouses in the United States. Its principal source of aluminum is Noranda Aluminum. In addition, Norandex owns the Chicago plant and distribution facilities of Revere Aluminum Building Products.  
(216) 232-5500

### **Norcast Inc. (wholly-owned)**

In a joint venture with Canron Inc. iron grinding media, mill liners and general castings are produced in foundries at Mont Joli, Quebec and New Liskeard, Ontario. These products are for use primarily in the mining industry.  
(416) 869-1087

### **Noranda Enterprises Limited (wholly-owned)**

Noranda Enterprises Limited is a management group formed in June 1983 to develop equity participation in the advanced technology field. They are involved in computer software, state-of-the-art telecommunications equipment and high power pulsed gas lasers, to name a few.  
(613) 230-6205

### **Wire Rope Industries Ltd. (51.4%)**

Wire Rope Industries Ltd. is the largest manufacturer of steel wire rope in Canada and also produces or sells fencing, netting, synthetic ropes and slings. Noranda also owns a 49% interest in Bridon American Corporation which has wire rope and steel wire-drawing facilities in Pennsylvania.  
(514) 871-9650

### **Electrolyser Inc. (50%)**

Electrolyser Inc. is a joint venture between Noranda Mines Limited and The Electrolyser Corporation Ltd. Inspired by the growing demand potential for hydrogen this venture was formed in 1980 to manufacture large industrial electrolytic hydrogen plants. An experimental hydrogen production plant was started in 1982 culminating 7 years of intense research by the two companies. Several commercial projects are under development including an electrolytic ammonia plant in Quebec.  
(416) 867-7303

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## **FOREST PRODUCTS**

Noranda participates directly and indirectly in the whole spectrum of the forest products industry.

### **Northwood Mills Ltd. (wholly-owned)**

Northwood Mills Ltd. is based in Toronto, Ontario. In addition to wholesaling building materials, Northwood Mills acts as the sales agent for wood products produced by Northwood Pulp and Timber Limited, Fraser Inc. and non-affiliated producers. The principal products are dimension lumber, waferboard and plywood. Northwood also markets wood pulp produced by Fraser Inc. and by James MacLaren Industries Inc. Over 80% of the company's sales are made in North America with the balance in the United Kingdom, Europe, Japan and other world markets. Northwood Mills distributes its products in Canada through a network of warehouses from coast to coast.  
(416) 365-0710

### **James Maclaren Industries Inc. (wholly-owned)**

James Maclaren Industries Inc., acquired by Noranda in early 1980, operates groundwood and sulphite pulp mills and a newsprint mill at Masson, Quebec and a bleached hardwood kraft pulp mill at Thurso, Quebec. Maclaren manufactures lumber in mills at Thurso and Notre-Dame du Laus, Quebec and operates a particleboard plant at Lac des Iles. The company also owns three hydroelectric generating plants on the Lievre River.

Maclaren has a 70% interest in Maniwaki Industries Inc. which operates a sawmill, a veneer mill and a parquet flooring manufacturing facility in Maniwaki, Quebec. Maclaren also has a 27% interest in Normick Perron Inc., the largest manufacturer of softwood lumber east of the Rockies. Normick Perron's operations include six sawmills, two plywood mills, one waferboard mill and a 42% interest in a newsprint plant.

(819) 986-3345

### **Northwood Pulp and Timber Limited (50%)**

Northwood Pulp and Timber Limited, owned jointly by Northwood Mills Ltd. and a subsidiary of The Mead Corporation of Dayton, Ohio, holds a pulpwood harvesting area covering 2.5 million acres of productive timberland in the Prince George, British Columbia forest district. The company has a kraft pulp mill at Prince George which has a rated capacity of 1600 tons of bleached kraft pulp per day.

Northwood Pulp and Timber also operates four sawmills in the northern interior region of British Columbia. The company also produces chips which are shipped to its pulp mill or sold to other pulp mills.

The Panelboard Division of Northwood Pulp and Timber is located in Chatham, New Brunswick. The annual capacity of the Chatham plant is 150 million square feet of board 7/16" thick.

Through the acquisition of North Central Plywood Limited the company operates a plywood plant at Prince George, British Columbia and is also managing a waferboard plant at Bemidji, Minnesota.

(604) 962-9611

### **Fraser Inc. (63%)**

Fraser Inc. operates two sulphite pulp mills, a groundwood pulp mill, a board mill and two sawmills in New Brunswick; a fine paper plant in Thorold, Ontario; and in Madawaska, Maine, a subsidiary produces groundwood and fine papers. Fraser also has a 50% interest in a paper mill in British Columbia and a sawmill in northern Maine. The company operates the second largest privately owned tree nursery in Canada for reforestation purposes.

(506) 735-5551

### **MacMillan Bloedel (49%)**

MacMillan Bloedel, Canada's largest forest products company, has integrated operations in Canada and the United States and other major operations and investments in the United Kingdom, Continental Europe and Brazil.

The company manages 1.6 million hectares of productive timberlands, which supply approximately 80% of its total fibre requirements. Of these timberlands, 1.1 million hectares are in British Columbia, where the company's headquarters and about 55% of its assets are located.

MacMillan Bloedel's products are marketed throughout the world and include lumber, panelboards, kraft pulp, newsprint, groundwood specialty papers, fine papers, containerboard and corrugated containers.

(604) 683-6711